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THE LOUISVILLE MEDICAL NEWS:

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EDITED BY

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PROFESSOR OF SURGICAL PATHOLOGY AND OPERATIVE SURGERY IN THE UNIVERSITY OF LOUISVILLE.

AND

WILLIAM H. GALT, M. D.

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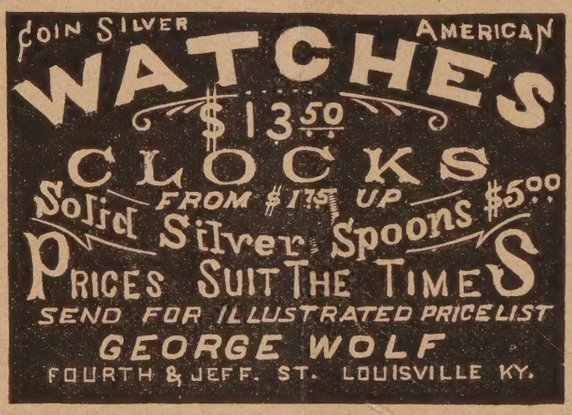

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In comparing the above analysis with that of the Extract of Malt of the GERMAN PHARMACOPŒIA, as given by Hager, that has been so generally received by the profession, I find it to substantially agree with that article. Yours truly, SILAS H. DOUGLAS,

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LOUISVILLE MEDICAL NEWS.

"NEC TENUI PENNA."

Vol. III. **LOUISVILLE, MAY 19, 1877.** **No. 20.**

HARD TIMES AND MEDICINE.

It does n't seem at first blush that there should be a very close connection between medicine and the times. We are wont to draw the line so distinctly between a profession and a trade that it is somewhat hard to realize that the laws of practice should be affected by the vulgar laws of commerce. But they are. Just as the price of food, just as rents, more than clothes (for vanity is the last thing to succumb), vary with the times, so do the incomes of doctors. What a harvest there was just after the war, when every thing was sweeping along with the speculative madness it introduced! The great doctor went way up in the thousands, and very few of the lesser ones starved. 'Sixty-five and 'sixty-six were booming years, and the seventies were turned amidst plenty as general as may happen to a calling where one in the ten gets the business to do. The panic of 1873 marked the decided turning-point, and the bellies of the little fish began to turn upward in the streams. The stagnation of 1877 reaches the deep waters and grounds many a whale.

Of course the times must affect practice. The doctor is as often a luxury as a necessity. It is nothing to call him in for a headache when money is plenty; his society may be worth the price of his visit when little is ailing. But when the days of economy are upon us he suffers next to the church. Then comes the trust in Nature worthy of a better cause, or wretched makeshifts, the taking of neighborly advice, the duplication of old prescriptions, the consultation of the drug-store man, or the experiment with nostrums. Then comes the counting of visits also, and goes the smile at his too frequent entrance, the "letting him know if necessary," etc.; and, worse than all, the non-payment of bills for services rendered, and the frequent reference of his claim to the bankrupt court.

And hard times affect the doctor for more reasons than upon the score of economy. His services are not needed so often then. Money in plenty engenders imprudence and excess, and with them comes sickness. Barring the epidemics, there has been a steady falling-off in disease during the last few years; general, we believe, but marked in this community. Thirty-four was the number of deaths in this city last week; one in four thousand people! Let us at least try to thank God for his general mercy.

Then hard times affect the doctor more cruelly than they do most men. He must make show of success in life. This is the world's measure of his capacity. He dare not cheapen his coat; and though his manly bosom may chafe beneath a dollar shirt, he can not lay it open to the world. He may not walk when abroad nor lessen his style at home; and the hollow tale of "fearfully busy" must still pass on, though he dread the bailiff's visit on the morrow.

But wherefore the record of these gloomy thoughts? They are for comfort. We know how general are their application. The telling of sorrows lessens their stings, and many may draw consolation from reading what they want to say. Many, too, may not have been able to solve the difficulties which surround them, and have blamed themselves for what is happening. Nay, brothers, the fault is not with you nor with our art. It lies far deeper than that. What has made

the times what they are has done it, and statesmen and sages have differed about this. As the day grows brighter all around it will beam for us also again. They say it is near at hand. It was to have been when the troops were moved; it is postponed now until the crops are moved. Let us at least hope that it will come when something is moved that lies between us and the sun of prosperity. There is much in hope and faith. "They were able because they thought they were able" was a grand old motto; and when flush times do come again we ought to be better for our trials. With faith made stronger in the passing ordeal, bearing the prosperity when it comes at last with gentler hearts.

THE PHARMACOPŒIA AND THE ASSOCIATION.

At the coming meeting of the American Medical Association Dr. Squibb, of Brooklyn, will introduce the subject, of which he gave notice last year, as to who should be the proper custodian of the Pharmacopœia of the United States. It is a matter of vast importance rendered doubly so just now, as the year for the decennial revision draws nigh. Very few physicians have any direct knowledge of the groundwork upon which American materia medica must rest. They see its initials quoted in the dispensatory; they have a vague idea that certain learned bodies construct it; but not many more have actually seen it than have viewed the weights and measures in charge of the county courts. Nor do glances at it inspire a curiosity for more intimate knowledge, for it has in truth a bare, bony sort of look. Dr. Squibb says it is very imperfect, incomplete in the knowledge that it should afford the pharmacist, as it is uninteresting to the physician, and in these swift times ageing terribly as the years pass by between its decennial revisions. He proposes, therefore, to thank the gentlemen who compose "The National Convention for revising the Pharmacopœia" for the services they have hitherto rendered, and allow them to cease from their labors. He is entirely respectful as to their ability, but doubts their nationality and the efficacy of their settled plans. To the American Medical Association, as being the only organized body which represents the medical profession of the United States, he would give the right to control the national Pharmacopœia.

Dr. Squibb has provided that the association shall not meet without having abundant opportunity of informing itself in advance on the matter to be brought before it. In a pamphlet of sixty pages, containing his explanations and the discussions upon the subject which have taken place at several of the medical societies, the matter is presented in a very clear light. The gist of the plan he proposes is this: There shall be a pharmacopœial council composed of five members; one (the president) from the association, one nominated by the surgeon-general of the army, one by the surgeon-general of the navy, and two to be selected by the American Pharmaceutical Association. This council shall take the matter in charge and employ the necessary expert assistance, payment for which and for other expenses to come out of the income derived from the copyright of the work. He proposes also that the Pharmacopœia shall no longer be a skeleton, but be clothed in the flesh and blood of knowledge which may advance the art of medicine, and that a yearly *fasciculus* denominated the Ephemeris shall gather up what is new and good.

It would seem that this was a rational view of the matter, a proper blending of medicine and pharmacy by representatives selected from their great councils in the country to control a matter in which both alike have such an interest; but it has raised a considerable storm. Not from the National Convention for revising the Pharmacopœia, which might naturally be thought to be the party insulted (for the societies and colleges which form that extensive body have not been heard from), but Philadelphia swells the gale. Dr. H. Wood, jr., buckles

on against the Brooklyn giant, both in his journal (the Times) and by pamphlet, and "The News and Library" comes also to the rescue. The answer given is that the change is undesirable and illegal. It is well given, and not without warmth. Philadelphia not only fails to see the necessity of the revolution, but calls it, in fact, rebellion. She sees in it but an attempt to take from her what she has considered so long her inalienable rights; a hint that in all matters medical she is not the nation; a stricken league between the New York pirates and the Western barbarians to steal her goods, to wrest from her her ancient copyright in the U. S. P., and check the flow of tribute which has for so many years, and so cheerfully, poured into her coffers for her grand but now somewhat dilapidated dispensatory; and she promises her gutters will run paregoric before she will yield. We admire her pluck; we respect the ability with which she defends her traditions; but there can be little doubt in which camp will hereafter wave the national standard.

A COPY of the present number of the LOUISVILLE MEDICAL NEWS is sent to many physicians who are not subscribers, with the view of showing them the character of the journal, and possibly inducing their subscription and support. The general features of the NEWS are such as characterize journals of its class. It contains twelve or more large octavo pages of reading-matter filled with short original articles upon practical medicine, the several specialties of the art, clinical lectures and reports, correspondence, reviews of books, formularies, miscellanies, selections from home and foreign journals, and editorials on current topics. It is issued every Saturday, never in a single instance having missed its proper mail. Its volumes begin with January and July. It is now in its third volume. Enlargement without increase of price is contemplated.

The reception of the journal has been most cordial, and every effort will be made to sustain and strengthen its interest. The journal can not be said to come into direct competition with any of its class. The field of the weekly is distinct from that of the monthly, and the NEWS is the only weekly medical journal published south of the Ohio River. While of course there can be no sectionalism in medicine in an improper sense, a journal may fairly (if worthy) count on the support of those in the territory around it as representing whatever special interest latitude may give rise to in our art. The journal also asks (and has received quite liberally) aid from all quarters.

The six remaining numbers of the present volume will be sent free of charge to new subscribers. Orders for the journal should be addressed to the publishers. Communications of professional interest are invited, which should be sent to the editors.

Original.

EXTRACT OF MALT.

BY E. R. PALMER, M. D.,
Professor of Physiology, etc., University of Louisville.

When extract of malt was first introduced into this country I had my attention called to it as a therapeutic agent, but never gave it or saw any one who had taken it. I lost sight of it as a remedy. About five years ago I began to prescribe lager-beer in certain cases, and have had many most admirable results that I could point to as following upon its use. I have found it of marked benefit in duodenal dyspepsia accompanied by constipation and emaciation, both of which it corrects; and also have frequently found it to be a panacea in cases of mental or physical exhaustion accompanied by fretfulness or irracibility and wakefulness. Only during the year past have I given the malt extract; yet the more I give it the better am I pleased with its therapeutic action in certain of the most common chronic maladies. In consultation with a surgical colleague I ordered "Trommer's Extract of Malt with

Hypophosphites," in the case of J. S., adult, of strumous habit, afflicted with an old psoas abscess. The patient had taken cod-liver oil previously. The improvement was very marked; the amount of discharge decreased rapidly, with a proportionate gain in flesh and strength, which soon enabled him to return to his bench as a cabinet-maker. When I last saw him, six or eight months since, he was still taking the remedy in question.

I was called, a few weeks ago, to see Mrs. O., suffering with bronchial catarrh, with a history of previous hæmoptysis. She had taken, under the direction of another physician, eight bottles of the Extract of Malt with Hypophosphites. I asked her what she thought of it, and her reply was that while it had not cured the cough it had entirely relieved her of a distressing dyspepsia and nervousness.

Mrs. B., suffering with post-nasal catarrh, dyspepsia, and constipation, is taking the simple extract of malt with decided alleviation of all her symptoms, especially her constipation, which was a source of much trouble to her.

Sarah B., adult (colored), patient of Dr. Cottell, a sufferer from chronic malarial poisoning, and much broken in health, began the use of malt and oil after a long and apparently fruitless course of bark alkaloids. Improvement was rapid and marked, so that she was soon able to resume her duties and go through with the arduous labors of spring house-cleaning.

J. H. M., adult, male, with previous good personal history, but bad family record, was seized suddenly, about six weeks ago, with hæmoptysis. In my absence he got of Dr. Cottell fluid extract ergot and gallic acid. The hemorrhage was checked for a day or two, and then returned; was checked, and returned a third time, when he went to bed. He was delirious, and had a temperature of 103.5° and a pulse of 130, night-sweats, and cough, with subcrepitant ralês throughout the right mammary region. I feared that I had a case of acute tuberculosis, and made a grave prognosis. I ordered carbonate of ammonia and morphine, and after a couple of days changed to syrup of wild cherry and chloral. After three or four days the delirium, which was never marked, passed away, and I ordered extract of malt and oil to be taken with wine. He protested that he could not take oil. I assured him he could take the preparation ordered. He improved steadily, is out of doors, coughs but little, has regained his flesh and appetite, lost his night-sweats, and expects to go to work at his trade (piano-making) in a few days.

Sarah H. (colored), married but sterile, has a strikingly similar history, excepting the delirium. In her case emaciation was very marked, owing probably to the large amount of blood lost. She has taken so far four bottles of malt and oil, and is clearly improving in health and strength.

One case more: Mattie M. (colored), a school-teacher, of large frame, weight before sick near about one hundred and seventy pounds, developed hereditary phthisis about eight months ago, with all the usual train of symptoms, including laryngitis. She had an emulsion of cod-liver oil (an excellent preparation), with moderate improvement, also Churchill's Syrup of Hypophosphites; but the cough and hoarseness, with occasional slight hemorrhage, continued. About three months ago I ordered carbolic acid by atomizer for throat, and malt and oil internally, withdrawing all other treatment. In the last two months I have not seen her, except on the street and once in my office. She hardly coughs at all, has regained nearly all the flesh she lost, has no hoarseness, and is regularly at her post in one of our public schools for colored children.

This last I deem the most remarkable case of all reported. The second stage of phthisis was well advanced, and all the graver symptoms which mark it were present. The usual treatment, including cod-liver oil and the hypophosphites, had been faithfully tried, with but slight improvement; while from the commencement of malt and oil improvement has been steady and marked.

This has with good reason been called the age of physiological therapeutics. The rapid and practical strides which physiology has of late years been making are taken advantage of by the therapeutist as foundation-stones upon which to base a system of rational medicine. The introduction of pepsin into pharmacy was an important practical application of physiological science, as also the more recent use of pancreatine in the administration of cod-liver oil, etc.

The introduction of malt into American practice, which has only become general since home houses have undertaken its manufacture, bids fair to play a more important part in physiological medicine than that of either pepsin or pancreatine.

Extract of malt is in the main two things; namely, digested starch and sugar and the digester of starch and sugar. Its other ingredients and properties may fairly be said to hold a minor rank in importance to these two qualities.

No class of food is of so great interest to the physiologist as that comprised in the "second class of proximate principles;" namely, starch, sugar, and oils. Of albuminous matter the necessity and the use are readily apparent; but of these other foods, and especially so of the two former, to attempt a comprehension of the part which they play in the economy is to reach beyond the mere matter of tissue-building to the subtiler questions that enshroud animal heat and the other various and complex phases of vital force. Neither starch nor sugar can be considered as belonging to the tissue-making food, so vastly disproportionate are the amounts of them consumed to the mere traces of them which are to be found within the organism. They enter the blood only to disappear from it; and are in constant demand, being largely eaten at each meal. The following tables taken from Dalton give some idea of the amount of saccharine and amylaceous food one consumes. And here let me remind, by way of digression, that starch as starch never gets beyond the alimentary canal; that by digestion it is completely transformed into glucose, or digested sugar, and as such enters the portal venous system. In view of this fact Flint, jr. does not mention starch as a proximate principle of the human organism, but treats of it as sugar:

COMPOSITION OF WHEATEN BREAD.

Starchy matter (starch, dextrine, glucose)	56.7
Albuminous matter (gluten, etc.)	7.0
Fatty matter	1.3
Mineral matter (calcareous, magnesian, and alkaline salts)	1.0
Water	34.0
	100.0

COMPOSITION OF THE POTATO.

Starch	20.0
Albuminous matter	2.5
Sugar and gum	1.1
Fatty matter	0.1
Cellulose	1.0
Mineral and vegetable salts	1.3
Water	74.0
	100.0

AN AVERAGE DAILY RATION.

Albuminous matter (grammes)		130
Starch and sugar	"	300
Fat	"	100
Mineral salts	"	20
Water	"	2,000

By these tables it will be seen that albuminous matter constitutes rather less than one fifth of the entire food for a healthy adult in active occupation. No words are necessary after these facts to impress upon the physiologist the paramount importance of starch and sugar as articles of food, and the great necessity for their proper digestion and assimilation. In the normal processes of digestion the saliva transforms to a certain extent the starch into glucose; while this act is completed not, as is stated by most writers on malt extracts, by the pancreatic juice, though this helps a little, but by the secretion of the duodenal glands (of Von Brun and Lieberkühn); a viscid, alkaline juice, not copious, but endowed with the power of very rapidly and completely transforming both starch and the varieties of sugar into glucose $C_6H_{12}O_6$. The change for starch is a simple one; thus, starch $C_6H_{10}O_5$, and water H_2O = glucose $C_6H_{12}O_6$. It is in the region where intestinal juice is

produced (the duodenum) that digestion is most actively performed. Here the gastric juice finishes its work aided by the pancreatic juice, which also digests the fat; while many of the ills that are attributed to the stomach, and still more that are laid at the door of an absolutely healthy liver, arise from disorders of secretion and absorption in this which has been aptly called the lesser stomach.

The physician who in the management of dyspepsia addresses all of his treatment to the stomach proper will quite often meet with cases which he can not master. How many such cases there are; cases of duodenal dyspepsia, wherein the doctor, having failed in the use of pepsin and mineral acids and strychnia and quinia, deems the liver the offending member, and bends all of his energies to its subjugation. The prevalence of amylaceous indigestion and (excluding drunkards) the comparative rarity of liver-disease are not sufficiently recognized. The cure of obstinate dyspepsia by lager-beer (by no means uncommon), a remedy not at all calculated to benefit the liver, has done not a little toward teaching us to more carefully classify our cases of dyspepsia, and to treat them accordingly.

How far extract of malt is of use, and in what class of cases, are questions that time alone can answer for us. In Germany it is firmly fixed in the front rank among remedies. Some idea of what it may be used for may be gained by the following analysis of one of the brands of American malt:

ANALYSIS OF THE TROMMER EXTRACT.

Malt sugar (glucose)		46.1
Dextrine hop bitters, extractive matter		23.6
Albuminous matter (diastase)		2.469
Ash	Phosphates	1.712
	Alkalies	.377
Water		25.7
		99.958

The first of these ingredients is starch and sugar ready for absorption. The third (diastase) is the analogue of ptyaline (of saliva), and of the similar ingredient of intestinal juice. It is present, as will be seen, in nearly two and a half parts per hundred. In saliva ptyaline exists in less than seven and a half parts *per thousand* (7.352 Dalton). I speak of diastase as the analogue of ptyaline. If it differs at all in its action from the latter, it is in the greater readiness and completeness with which it transforms starch into glucose. In malt extract its properties are preserved, and the glucose retains its integrity; while in beer the process of fermentation has destroyed nearly all of these qualities, and produced alcohol, with, though to but a slight degree, its objectionable features.

Malt extract, with its combinations, has been recommended and deserves a trial in the following diseases: anæmia, chlorosis, marasmus, dyspepsia, neuralgia, insomnia, pulmonary and bronchial affections, dysentery, constipation, scrofula, convalescence from exhausting diseases, etc. It may be had combined with any of the standard tonics or alteratives, for which it makes an admirable vehicle.

LOUISVILLE.

THE PATHOLOGY AND TREATMENT OF SPRAINS.

[Read before the Kentucky State Medical Society.]

BY RICHARD O. COWLING, M. D.,

Professor of Surgical Pathology and Operative Surgery in the University of Louisville.

The importance of sprains can not be too carefully kept in mind. They are the fruitful source of lameness; they lead to the destruction of joints; they may be the determining factor in malignant disease; they cut a ghastly figure in the causes for amputation.

The qualification of simple, which so often accompanies reference to this injury, is a dangerous one, leading to neglect and disaster. It is a matter of experience that useless limbs have resulted from "simple sprains" as often as from those which had been denominated "severe." It was to emphasize this point that Sayre gave the quaint title to his essay, "Sprained Ankle, or the misfortune of not breaking your leg." It may indeed be written of sprain in language similar to that used by Percival Pott in reference to head-inju-

ries, that there are none so severe that may not be recovered from, none so slight that they may not destroy the usefulness of the limb. Every sprain is worthy of attention, and should receive professional treatment.

The diagnosis of sprains is not always an easy affair. Between them and fracture, or between them and dislocation, it is oftener far more difficult to distinguish than between dislocation and fracture, which is the problem in differentiation generally set for solution. The several varieties of arthritis—simple, rheumatic, and specific—are continually confounded with them, and I at least have mistaken malignant disease for sprain.

Our knowledge of the pathology of sprain (and indeed of the whole subject) has improved much of late years. While not disregarding constitutional causes in the explanation of many symptoms which may arise during the progress of a sprain, we do not take refuge in the diatheses as much as we were accustomed to do formerly. We look more to the local condition of affairs for a solution of the difficulties. The problem has been greatly simplified.

A number of lesions resulting from a fall or twist may come under the name of sprain. Strictly speaking, the term would be confined to the stretching of the tissues around the joint, the muscles, tendons, apóneuroses, nerves, vessels, and ligaments; but the causes which give rise to this may, and do oftenest, lead to rupture of some of these structures. The articular surfaces may also be involved to the extent of the erosion or displacement of cartilages. It must not be forgotten, too, that the stretching of inelastic tissues damages their integrity.

The symptoms following acute sprain are readily accounted for. The weakening of the vessels and consequent congestion, the unyielding aponeuroses, the swelling in a part not fitted to swell, the already injured nerves exposed to continued pressure, plainly explain why it is that a sprain hurts so badly. The damage done to the structures not only by rupture, but simple stretching, not unnaturally may induce an inflammatory stage. The derangement of the exquisite adaptation of the many elements contained in the joint and its motors, made up so much of tissue naturally slow to repair, the extravasations and exudates thrown in such quantity on the absorbents to be carried away, tell why it is that time must elapse before the functions of the joint are resumed. The history of events naturally flows from the primary violence; but there are cases in which the persistence of symptoms is out of all proportion to the damage inflicted at the outset.

Chronic sprain may follow upon acute sprain, or its subacute character may have been so from the first. Violence may not have induced it. A high heel or a run-down boot may cause it at the ankle; and I have seen a painful sprain of the middle finger of a lady gradually set up by the continued lifting of a heavy coffee-pot, all the symptoms as gradually disappearing when an urn was substituted.

The appearance of joints in chronic sprain is quite uniform. They are cold, they are discolored sometimes even to positive blueness, they are swollen, while the limb above is wasted. Swelling, however, is not constant; joints of seemingly perfect shape may be useless. Motion in them is difficult and accompanied with pain. On manipulation tender spots are discovered in the neighborhood. The situation of these spots is pretty constant for the several joints; to the outside about the insertion of the biceps in sprain of the knee, to the outside and inside forward on the tarsus in sprain of the ankle, etc.

Languor in the circulation is the prominent feature, and the key to most of the conditions. There is malnutrition, local in its origin. Absorption is in abeyance. Plastic deposits resulting in the inflammatory stage, or slowly gathering as the result of chronic congestion, are not taken up. Adhesions are formed. Tendons, ligaments, and aponeuroses are shortened by continued disuse. The bodies of the muscles waste, and then contractility is lost. The nerve-structure has

not been repaired. New fibers have been developed in adventitious tissue, and they all alike cry for good blood, and moving blood. With such a condition of affairs loss of function, pain, and tenderness naturally continue.

As violence instituted the acute sprain, prolonged rest is the chief factor in keeping up chronic sprain. We see, indeed, effects closely resembling those of sprain when no violence has been done to the particular part; as in the stiff knee, when the dressings for fractured thigh (far away from the joint) have been used long; the stiff elbow, when the arm has been carried for a while in a sling, it may be, for a wounded hand. And the rest not only accounts for the rust and shortening of tendons, etc., but the vessels about the joint are by nature fitted for the motion they must receive in the movement of the joint, and can not, but to the detriment of their use, be denied this too long. We are accustomed to refer the ill results from sprain from motion too early set up. It will be more convenient to reconcile this theory with the one presented when we come to the treatment of chronic sprain.

One word only as to the constitutional involvement in chronic sprain, and we pass to the consideration of treatment.

That the cachectic condition of very many subjects of chronic sprain is an effect, and not a cause, is well attested. It is not peculiar to this injury that local irritation may at length extend its influence to the impairment of general functions. While struma and rheumatism and syphilis may complicate this injury, and call for specific treatment, they are often blamed for what they do not deserve. The barren results from the use of the oils and iodides on one hand, and the brilliant results from local treatment upon the other, have shown this time and again. Surgery has had some sharp lessons taught it upon this point from very humble sources. Specific treatment may be called for, and especially tonic treatment, in addition to local measures instituted to restore the natural condition of the joint; but these last are of prime importance.

The means of treating sprains are by immobilization, mobilization, and extension; and mobilization may be sudden and with force, as in the treatment of anchylosis; it may be gradual, and accompanied with friction and "massage;" it may be combined with extension. Beside these there are several adjuvants of treatment, constitutional and local, which can not be conveniently classed.

It will simplify matters if we direct our remarks chiefly to treatment of sprain at the ankle-joint (the seat of most of these injuries), and refer cursorily to sprains in other localities.

The safest treatment for acute sprained ankle is by immobilization.

The history of such a case, when it has been severe enough to cause a physician to be sent for, is generally this: domestic remedies have been tried; the ankle has been bathed in cold water; rags wet with arnica, brown paper steeped in vinegar or liniments have been applied to it; and probably little relief has followed.

The first thing to be done is to elevate the limb upon a pillow, if this has not already been attended to; next, to bathe the foot in hot water, which will generally be found more effectual than cold. It should be of the highest temperature tolerable by the patient, and had best be poured upon the ankle while the limb is still elevated and extended over the foot of the bed. When the foot is dipped into a vessel containing the water, which is the usual method followed, the necessarily dependent position of the limb mars in a great measure the efficiency of the remedy by favoring the congestion, which gives rise to so many of the symptoms to be subdued. During the affusion, which should last twenty or thirty minutes, the foot and ankle are to be stroked upward gently at first, and with increasing pressure as it can be endured, and the joint moved carefully. It is more than probable that the patient will shrink from this portion

of the treatment, but a speedy relief from his pain generally reassures him as to its efficacy, and allows it to proceed. Comparative ease having been established, immobilization of the joint is best secured, I think, by the many-tailed or strip bandage covered by the roller. The strips made of muslin are wet and applied from the root of the toes to a point eight or nine inches above the ankle. These are covered with a flannel roller carried well up to the knee. We have here a very rational remedy. The heat and moisture continued in the many-tailed bandage, the compression and support offered by this and the roller to the weakened vessels, removing congestion, aiding absorption of the exudates, relieving spasm, and preventing further violence, go directly to the seat of the difficulty.

The patient having been rendered comfortable (a visit to a sprain is likely to consume an hour or so), may be left with directions for an opiate to be taken if from nervousness he can not sleep, and for removal of the bandage, if this from any cause may induce or aggravate pain. Hypodermic morphia or atropine have been advocated in the outset of sprain. Though I have not used them, I can conceive their use to be beneficial at times.

Sprains of a mild character may be trusted at first to the wet towel, which is a favorite method of treatment, but there are few which do not demand the roller before weight can be borne upon the joint they involve.

Immobilization may be continued by means of the roller, leaving off the wet bandage beneath, after four or five days, when the acute inflammatory stage is passed. It is tedious to keep it up during the period necessary for the cure of a severe sprain, which may last several weeks. It should not be left to the patient or any of the patient's accomplished friends to apply. It is best, therefore, to replace it with plastic apparatus (the happy name given by St. John, of New York, to the various dressings commonly known as immovable). This may be made with any of the stiffening materials in use. It was my custom formerly to make a boot of manila paper strips, which is wonderfully stiff and light; but it is tedious to make them, and of late years I have almost invariably used the plaster-of-paris dressing. The old-starch bandage, or flour and egg bandage, or silicate of soda bandage of course will do. The plastic dressing, of whatever it be, must rest on a proper layer of cotton batting. Without this the dressing not only loses its peculiar usefulness, but is fraught with danger. The plastic boot constructed for sprain may gradually be shortened for the convenience of the patient by cutting away the tops until it becomes a high gaiter, still keeping the ankle at rest. It may be split in front, so that the limb can be removed at pleasure, for the purpose of friction, etc., and secured while on by the loop bandage. The patient, after a few days from the receipt of his injury, may be out on crutches, his foot in a sling-bandage, if necessary, secured around the neck. This may soon be discarded, as the support from the boot allows him, without pain, with the aid of his crutch, or even without it, to bear weight upon the injured foot. Before dismissing this part of the subject, I may say it is a very frequent practice to use the plastic dressing from the outset. I prefer, however, the more direct compressure exerted by the roller in the earlier stages.

The above details apply to a case of "severe sprain," one in which the lesion amounts to actual rupture of tissue, and the immobilization is kept up for its repair. Its severity, as already stated, is not called for in sprains of lighter degree; but it is upon this very point that the great difficulty in understanding sprains exists. I have referred to the point that the most serious results have followed upon simple sprains. The patient had continued to walk upon the foot, it is said, until serious mischief had resulted. It takes something more to explain the difficulty than this, at least if we wish to reconcile it with the experience of those who practice early movement as a cure. I think

it will be found to be in this: the person does not walk naturally on the slightly sprained foot. We see that he limps. The movements of the joint are constrained. If the injury has not been severe enough, or the effects have subsided sufficiently for him to take free steps, difficulty is not likely to arise; but if this is not the case, in the half-way manner in which the joint is used, it is actually suffering from the combined effects of prolonged rest and continual irritation. My attention has more than once been called to the fact that immobilization is not absolutely necessary from the first, even in cases of sprain apparently severe, and have caused me to think much upon the means of discovering where the line was to be drawn. Two of my friends got sprained ankle within a day or so of each other, and apparently very severe sprains. One submitted to my treatment, had a plaster boot, etc., and was all right in about a month. The other declined all restraint, rubbed his purple and swollen ankle, walked out heavily upon it, as he said, the day after his accident, and continued to walk in a very short time without inconvenience. He was a soldier, of vigorous build and indomitable pluck. He told me that the accident had frequently occurred to him during the war, and he had learned from experience that this was the best treatment for him. A man upon whom I had once put a paper boot for severe sprain told me afterward that it was "next to the best way he ever saw of treating sprained ankle; he had had it several times, and could walk it off if he started in from the first." This man drank freely, and was generally fortified with liquor. A young lady had a sprain frightful to look at, extravasation extending from the instep up to the calf. It did not pain her much, she said; sent for me to quiet her mother's fears. In spite of my lecture upon the danger of neglect, she took off the bandage and put on a shoe the next day after my visit, escaped confinement to do her spring shopping, and had no serious result, nay, no inconvenience. But I confess that I am afraid to recommend such practice; and in joints of the lower extremity which have to sustain weight must consider that immobilization is the safe practice in acute sprain. If the injury has resulted in intra-articular trouble the experiment would be highly dangerous. I have alluded to early movement as a palliative of pain in sprained ankle. In a number of cases of sprains in the joints of the upper extremity I have relied upon it exclusively. I was led to it, independent of my reading, from the following circumstances: A few years ago, after a sleet, by one of these curious coincidences which occur in practice, three cases presented themselves to me for injury at the elbow resulting from falls. In all of these pain and voluntary immobility were prominent symptoms. In the careful examination and frequent movements necessary to diagnosis at this joint, while I discovered that the trouble was sprain, I saw also that the patients were more comfortable after I had done with them than when I commenced. Immobilization and the continued warmth of cotton-batting, however, is still a most useful way of treating sprains of the upper extremity, and the hot water douche at times invaluable.

Mobilization has no substitute in sprains of a certain character. Passive motion is frequently necessary after a joint has been fixed for a time. The patient's will may not be strong enough for him to make it for himself, and its neglect has often caused the best instituted treatment to result badly. The use of mobilization in chronic sprain is one of the most brilliant achievements in modern surgery. Practiced ignorantly for a century perhaps by the "bone-setters" at a comparatively recent date a knowledge of its rationale and limits have been determined by the regular profession. Its action at times is magical. The method of the "bone-setters" offers the most striking example of its usefulness. This was ably set forth by an English surgeon, Mr. Hood, in several papers in the Lancet five or six years ago, afterward pub-

lished in a small volume. He had learned it from a Mr. Hutton, one of the most successful practitioners of the kind in England, a man perfectly ignorant of anatomy and pathology, but who had treated successfully cases which had limped for years under the first surgical talent of Great Britain. The principle is the same at all joints, and easy to practice. Hutton's idea was that all joints not plainly inflamed, etc., were "out," and his business was to get them back by manipulation. He prescribed a poultice persistently applied for a week. His manipulation was then done in the following manner: With the thumb of the left hand pressing closely on the tender spot which always exists near a joint in chronic sprain, with the right he performed flexion, extension, and circumduction, or rather a rapid twist. Sometimes after the first, at others after several movements of this sort, a pop is heard. The joint is "in." The patient, who may have been a sufferer for years, experiences immediate relief to a great degree, which is increased rapidly by further manipulation, and is cured in a trifling time. The pop, as explained by Mr. Hood, is the breaking of the adhesions, for which the sudden movements are instituted. With the rupture of these the restoration of the circulation, the adventitious material is absolved, and with it goes the hyperæsthesia. The confidence of the bone-setter in his practice is no unimportant factor in the cure of the patient. Of course he will fail in a number of cases. Success in a few, however, is enough to stamp his procedure as a marvel. Experience teaches the best of them in which variety of joint injury to practice, chiefly those not marked with inflammatory symptoms. I have practiced sudden mobilization in a number of cases, sometimes with wonderful success. A lady treated first with plastic apparatus for sprained ankle, resulting badly, limping for a year, and presenting the usual signs of a chronic sprain, was cured with one movement. A man with trouble in hip-joint, who was treated for fracture (erroneously), bed-ridden for several months, was put on his legs again after a month, during which time the movement was practiced half a dozen times. His improvement was well marked from the first. A young lady from Alabama, whom I saw with Prof. Yandell, on crutches for two years from a sprained ankle, returned home able to walk after forcible manipulation under chloroform. These are the striking examples which have come beneath my notice. I have failed in a greater number of cases with the twist, sometimes, though not always, succeeding with other methods. Apparently, one of the most favorable cases for the practice was in a girl under the treatment of Dr. Roberts and myself for several years. There was nothing about her ankle which indicated that it was unfit for use. She had sprained it, got on crutches, and, as happens with timid people at times, would not give them up. We practiced Hutton's method, heard the cracking, but nothing could induce her to try to walk without support. I made several more sudden movements at subsequent periods, prescribed the massage, which I have seen can not be intrusted to the patient's friends, but failed to get any benefit. She subsequently was put in a plaster boot by Dr. Roberts, and has worn it two years. She has gotten enough confidence to give up her crutches, and go without the boot a few days at a time, and apparently will be restored. The immobilization in this case is not so entire as to preclude all motion at the joint.

It is highly important to remember that the crutch may become a most dangerous enemy. A prominent lawyer of Louisville hobbled for two years on crutches from a sprained ankle; was treated by every method save motion; saw Paget and Nélaton about the matter, and was ultimately cured by Markoe, of New York, who simply took away his supports. He actually walked from the first moment they were left off.

Massage is one of the most scientific of procedures for the relief of sprain. Its name and usage in modern times come from France, but the process is older than the

Cæsars. Nor are its most brilliant results confined to this injury alone. I had best allow one of its chief advocates in this country to give its definition. In a paper published in the Philadelphia Medical and Surgical Reporter, Sept. 5, 1874, Dr. Douglas Graham, of Boston, says:

"Massage is in its widest acceptation a hygienic and therapeutic agent, consisting not of friction, percussion, pressure, or movement alone, but of a permutation and combination of all these varied modes of applying force to the surface and underlying tissues of the human body. In its most limited sense it is understood by the profession at large as "rubbing," but its pre-eminently useful maneuver is what the word massage literally implies; viz. kneading, pressure with movement, mal›xation."

The motion in this plan is done gently, and with the massage increases as the patient may stand it. It has been advocated in sprain at all periods, but chiefly in chronic sprain. I have said all my space allows me of its applicability to acute sprain. I can not do better, in describing the process, than to copy from an excellent report of a case treated by this method made by Dr. W. R. Fisher, of New York, in the New York Medical Journal of Jan., 1874. The case was one of chronic sprain, of aggravated character. Here is the description of one kneading:

"The whole limb from the knee down was first rubbed and kneaded for twenty minutes, lightly where the parts were tender and forcibly where the pressure was well borne. The skin was sponged wi h water and dried with a towel whenever the epidermis became dry and heated by the friction, and was in danger of being rubbed off. (It may here be remarked that oil is sometimes applied to the skin to prevent this accident.) Then the manipulator passively exercised the toes in various directions, and very gently moved the ankle-joint in the direction of extension and flexion. The extent of movement in the latter was governed by the amount of pain which it produced, care being taken to avoid giving rise to more than slight twinges, which could be borne without suffering. These maneuvers occupied about five minutes, and were followed by the kneading and frictions a little more forcibly administered, which in turn gave way to the passive movements alternating until the whole treatment had continued for an hour and twenty minutes."

The exercises were repeated daily for seven days; during the last three reached to three quarters of an hour; on the seventh day the natural curve of the foot was restored. The patient walked with mechanical support; in three weeks gave up her crutches, and was ultimately restored to full bodily health with sound limbs. I give this extract to show that massage is a matter of skill and patience, and as those who have experienced it in the Turkish bath will bear witness, one of physical endurance. Its rationale in the introduction of good blood to the parts is apparent. Its usefulness can not be overestimated, and failures from a few minutes' hand-rubbing must not be set down to its account.

Under this head of Mobilization Continued I report that in a case under my charge, of chronic sprain at the shoulder, where pain, in certain movements (elevation), and shrinking of the muscles are shown after four months' inactivity, the patient has received great benefit from the health-lift. He will not submit to forcible circumduction nor to massage.

Extension is practiced in sprain, not without results. It is done with weight and pulley (Buck's method), and can only be superior to other methods where the trouble is in synovitis. If the trouble be intra-articular adhesions (Hood) the method by manipulation promises better and quicker results. It has the disadvantage of forced rest at a point where this is hurtful. To avoid this Sayre treats by extension, with motion, on the same principle as his method in hip-joint disease. As this method requires instruments fitted to the case, it is not likely to be of the general service other plans we have referred to. It is more specially applicable to intra-articular trouble, but in extra-articular trouble also as motion is allowed, it has every advantage over extension by weight and pulley. Its success in the hands of its originator has been marked.

In conclusion, I may say that the chief difficulty in the treatment of acute sprain is in getting the patient to submit to the necessary restraint. No directions can be given for the tact required by the surgeon

to effect obedience to his commands, but the clearer his ideas be concerning the injury before him the easier will it be for him to make converts of those who come to him for treatment. In chronic sprain the conditions are reversed. It is the patient then who is anxious to submit to any thing for his relief, and the physician who must be aroused to action. The lazy prescription of a liniment, or directions left to the patient or the patient's friends to carry out, will not do. His personal superintendence is required, and the expense of not only his mental but physical energies. And the rewards of these are not surpassed by any of the achievements of surgery.

AN EXTRACT FROM A CLINICAL LECTURE ON THE IMMOVABLE OR PLASTIC DRESSING IN FRACTURES OF THE LOWER EXTREMITY.

BY DAVID W. YANDELL, M. D.,
Professor of Surgery, etc., in the University of Louisville.

Gentlemen: To recapitulate—You must have the whitest, finest, cleanest cotton batting, the smoothest and freshest plaster-of-paris, and a lot of roller bandages made of the cheapest and flimsiest cotton cloth, such as is used for lining comforts or covering cheese. After getting the cloth have it well washed and dried. Tear it then into strips of two and a half or three inches in width, and into two different lengths. One should be nine or twelve yards long. The remainder should be but three yards long. Lay these latter on a kitchen-table or board, and have the dry plaster well rubbed into the cloth. Roll them now as evenly as you can. Have an ordinary wash-basin one third fall of water a little warm. Put into this two heaping tablespoonfuls of powdered alum. Have the whites of half a dozen fresh eggs beaten into a froth. Open out the batting carefully, that it may be in a sheet rather than a roll. Envelope the broken limb in this. Be particular that the bony prominences are well covered. Secure the cotton with your long roller, into which, you will remark, you have rubbed no plaster. Put your plaster rollers into the basin of water. Squeeze and press them with your hand, that they may be well wetted. Apply these to the limb, one after another, until you think you have made the dressing sufficiently firm. I think you will find three layers usually sufficient. You may apply the fourth immediately over the seat of the fracture. As you proceed you may put the rollers on longitudinally instead of circularly. You observe we make no "reverse" turns of the bandage. They are unnecessary; indeed they give the dressing a clumsier appearance than it otherwise would have, and are in that at least objectionable. As you apply each layer of bandage smooth it nicely with your hand. It will add to the firmness of the dressing and make it dry more quickly. Having put on as many rollers as you care to, and smoothed them well, wait a few moments for the plaster to dry. The alum you have added to the water will greatly facilitate this. When comparatively dry apply the whites of the eggs over the plaster. Now apply a roller without plaster over this; or, if you prefer, cut the roller into strips and lay them along the length of the limb. The purpose of the egg is to prevent the plaster from chipping. The purpose of the additional roller is to assist in this, and to give to the dressing a finish which it does not otherwise have. Beside this the whites of the eggs will be a great convenience to you in enabling you to cleanse your hands of the plaster. They are better than any soap or any amount of water. Indeed they are the only substance I know which, if you work much in plaster, will prevent your hands from chapping and becoming harsh and rough.

LOUISVILLE.

DR. MARY PUTNAM JACOBI was awarded the Boylston prize of the medical faculty of Harvard University over three hundred competitors. The prize was given for the best essay on the question, "Rest for Women during the period of Menstruation."

Reviews.

Transactions of the American Gynecological Society, vol. I, for the year 1876. Boston: H. Houghton & Co. (The Riverside Press.) 1877. Price, $5.

This volume contains the minutes of the inaugural and first annual meetings of the society, constitution, by-laws, etc., and the text of the papers read at the first meeting, which was held in New York last June, and the discussions thereon. The papers consist of the annual address by the president, Barker; on Uterine Flexions, by Emmet; Cicatrices of the Cervix, etc., by Skene; Normal Ovariotomy, by Battey; Perineal Rupture, by Duncan; Viburnum Prunifolium, by Jenks; Xenomenia, by Parvin; Pregnancy and General Pathology, by Barnes; Fibrous Tumors, by Byford; Laparotomy, by Thomas; Pneumatic Self-replacement, by Campbell; Hydrate of Chloral in Obstetrics, by Richardson; Labor Complicated by Uterine Fibroids and Placenta Prævia, and rare forms of Umbilical Tumor in Fetus, by Chadwick; Latent Gonorrhea and Fertility, by Noeggerrath; Urinemia in Uterine Malignant Disease, by Wiltshire; Genital Lesions of Childbirth, by Goodell; Hermaphrodism, by Tait; Cystic Tumors of Abdomen, by Bixby; Solid Uterus Bipartitus, by Peaslee; Vesical Calculi after cure of Vesico-vaginal Fistula, by Campbell; and Memoir of Simon, by Mundé.

Our present space forbids even the full titles of papers. Never were proceedings of a society of more scientific and practical value. No one interested in Gynecology can afford to be without this report of them. The Riverside Press eclipses itself in its present work. The next meeting of the society is to be held in Boston May 30th, 31st, and June 1st, of this year.

A Course of Operative Surgery, with plates drawn from nature, by M. Leveillé, and colored by hand under his direction, by Christopher Heath, F. R. C. S., Surgeon to University College Hospital, and Holme Professor of Clinical Surgery in University College, London. In five parts, $2.50 each. Philadelphia: Lindsay & Blakiston.

We have in a previous number called attention to this magnificent work by Prof. Heath. Part IV, embracing excisions and amputations, has been received, and the remaining number is expected in a few days. The book is to be obtained by subscription, which should be sent to Messrs. Lindsay & Blakiston.

Formulary.

[Communicated by various practitioners.]

SOLUTION OF SALICYLIC ACID.

℞ Acidi salicylic..... ℥ ss;
Liquor ammon. acetatis .....
Syrupi limonis..... } āā ℥ ij.
Aquæ .....

M. Making a clear solution five grains to the drachm, and positively pleasant to the taste.

IN HEMOPTYSIS.

℞ Fluid ext. ergot.....
Tinct. opii camphorat.. ..... } āā ℥ ss.
Syrupi tolutan.....

M. A dessertspoonful every half hour, p. r. n.

FOR EXTERNAL USE IN ECZEMA RUBRUM.

℞ Plumbi carbonatis..... ℥ ij;
Morphiæ sulphatis..... gr. x;
Chloroformi ..... ℥ ij;
Glycerinæ..... ℥ ij. M.

AN EXCELLENT AND ELEGANT FORMULA FOR PRESCRIBING GALLIC ACID.

℞ Acidi gallici..... ℥ j;
Glycerinæ ..... ℥ j;
Aquæ bullientis ..... ℥ v.

M. A tablespoonful *pro re nata*.

IN BRONCHITIS OF TYPHOID AND OTHER ADYNAMIC FEVERS.

℞ Olei terebinthinæ..... m. x–xx;
Ether sulphurici..... m. xx–xxx;
Spts. juniperi comp..... m. xxx;
Misturæ acaciæ ..... ℥ jss;

M. Ft. haustus. To be taken every two or three hours.

ASCARIDES VERMICULARES.

℞ Tinct. ferri chloridi ..... ℥ ss;
Aquæ calcis ..... O j.

M. Ft. injectio. Use one half at night and the other half in the morning.

Miscellany.

THE plague has appeared in Bagdad, and the cholera is at the Persian frontier. Its invasion of Europe is rendered more imminent by the Turco-Russian war.

THE Association of the Medical Colleges of the United States meets at the Palmer House in Chicago June 2d (three days before the meeting of the American Medical Association). Questions of vital importance to the profession will come before it. A full and accredited representation from the schools is expected, and a death-blow to diploma mills and bogus beneficiary scholarships is near at hand.

WHEN a printer has a dependent family, and a proof-reader is not endowed with second sight, and the mathematical education of an editor only went as far as the calculus, and a specialist writes a bad hand, typographical errors must of necessity be somewhat in order; still there is the comfort that not one in a thousand will find them out.

A NEW edition of the United States Dispensatory is announced. Dr. Geo. B. Wood has revised the first part, and Dr. H. C.Wood the remainder, aided by Professor Bridges.

THE AMERICAN MEDICAL ASSOCIATION.—The twenty-eighth annual session will be held in Chicago Tuesday, June 5, 1877, in Farwell Hall, at 11 A.M.

THE postmaster-general, curiously enough, has decided that "insets" shall no longer be stitched in the journals. Advertisements must hereafter be printed at the office of publication, and be on pages the same size of the journals in which they appear. This will occasion a serious loss to publishers having contracts to issue the "insets," and to manufacturers who must have a large supply on hand.

THE committee of arrangements of the American Medical Association has been tendered, by the North Western R. R. Co., an excursion to Bear Lake, Wisconsin, or St. Paul, Minn., to take place at the close of the session, should a sufficient number desire to go to make the trip a pleasant one.

THE New York journals mourn the death of Dr. N. G. Hutchinson from diphtheria, contracted by watching at the bedside of a child suffering from diphtheritic croup, for which he had performed tracheotomy. He was but twenty-four years old, and had given promise of a brilliant career.

THE question of several hundred commissions in lunacy, to sit specially in base-ball cases, is being agitated.

DR. THOMAS ADDIS EMMET, of the New York Women's Hospital, is engaged on a comprehensive work on Gynecology.

THE unusual length of the original communications has crowded out several of the departments of the journal.

THE present high price of quinine can not be wholly attributed to the tariff. It is in the main due to the war in Colombia, and the uncertainty of supplies. Nevertheless Congress ought to pass the "Morrison Bill," and not protect a drug which is as necessary as bread to the people in a large district of this country. The deficiency in the revenue could be well made up by an additional tax on patent medicines.

SINCE the decline of Paris, Vienna is the center of the medical world in Europe.

MR. JOHN WOOD takes the chair in King's College, London, left vacant by the death of Sir William Ferguson, and refused by Lister.

ROBINSON CRUSOE was written by DeFoe several years after he had had an apoplectic stroke.

Selections.

A Method of Measuring the Lower Extremities.—Dr. R. O. Cowling, of Louisville, writes to the New York Medical Record:

"By the ordinary method of obtaining the comparative length of the lower extremities it is difficult to get exact results. Even when every precaution is taken to guard against the obliquity of the pelvis (which is the chief source of error), an eighth or even a quarter of an inch difference may escape detection. Such at least is the case when measurement is made between the spinous process of the ilium and the malleolus on each side. Neither of these presents a point, but a surface which in persons well-clothed in flesh occupies considerable area. When measurement is made from the umbilicus or episternal notch to the middle of the sole of each foot (Sayre's method, I believe), this difficulty is, perhaps, done away with. I have, however, for several years past, adopted another plan, which is, I think, more convenient, and by which the liabilities to error (when a tape-line alone is used) are reduced to a minimum. The plan is this: The patient, lying on the floor or a table (a soft mattress will confuse any measurement), the parallelism of the iliac spines and the proper extension of the limbs being looked to, a point is taken on the umbilicus, and marked with ink, if necessary. Commencing at this point, the tape is carried in turn *around the sole of each foot, and back again to the point of departure.* The difference between the two measurements thus obtained represents *twice* the amount of difference which exists in the length of the limbs. For instance, if the measurement thus obtained when the tape is carried around the right foot is fifty-four inches, and when carried around the left foot it is fifty-five inches, the difference in the length of the limbs is *half an inch.*

"Of course care must be taken to carry the tape around corresponding portions of each foot, and in the same direction—from within, outward, or *vice versa*—on both sides. A great amount of swelling in the foot may also occasion error, but not to the extent it might be imagined. I think the method described will be found convenient and useful, either when employed alone or to verify results obtained by other plans. It has the advantage of indicating small differences, as these are multiplied."

Constipation and Fecal Accumulations following Febrile Diseases.—The effect of fever is to dry up all the secretions present in the intestine; consequently a very common complication, when a patient is making a recovery from pneumonia or any other disease in which fever has been a leading element, is an accumulation of fæces at different parts of the intestinal tube. In former days, when fevers were treated upon the plan of administering medicines which were to eliminate the poison from the system by way of the bowels, scybalous accumulation did not occur very frequently; but nowadays, when the treatment is conducted upon an entirely different plan, the fever may be continued and retained as the direct result of fecal accumulation. This is especially true of the latter stages of a fever; but such accumulation can be prevented from forming, and be removed by the use of a proper kind of cathartic. For this purpose there is no combination more serviceable than the compound jalap powder, and it is the one which should by all means be employed. It promotes the discharge of the serous elements into the intestine, assists in the absorption of the deposits which have taken place in the lung, if the case be one of pneumonia; also acts upon the kidneys as well as the bowels, and is one of the mildest that can be employed which so fully meets the indications in this class of cases.—*Prof. Thomson, in New York Medical Record.*

The Substitutes for Quinine.—Since 1866 the government of India has appointed several commissions to examine the therapeutic values of the different alkaloids extracted from the cinchona bark. Of 1,145 patients treated:

410 took cinchonine, and 400 were cured,
359 " cinchonidia, " 346 "
376 " quinidia, " 365 "

or in all 1,111 were cured. From these facts the commissioners at Madras concluded that the effects of the three alkaloids differed little from those of quinine, for which they can be readily substituted. Cinchonine and cinchonidia can be manufactured for one third the price of quinine. Cinchonidia is said to agree better with some stomachs than quinine; it is also said that it does not cause cinchonism, but this is an exaggeration. In general, however, it does not cause this unpleasant symptom unless the dose be considerably above the average dose of five or six grains.—*Lyon Medical.*

The Diagnosis of Paralysis of the Muscles of the Forearm.—To distinguish saturine paralysis from paralysis produced by an affection of the radial nerve, M. Hardy points out one characteristic sign. In radial paralysis the supinator muscles are affected as well as the extensors, while in lead paralysis the extensors only are affected, and this explains why the patient can carry the hand supine.—*Medical Press and Circular.*

Fissure of the Anus in Infants.—Dr. Mabboux reports the case of a child of two months old suffering with an anul fissure. Attention to the bowels and a salve of extract of rhatany effected a cure in six days.—*L'Union*, 1876.

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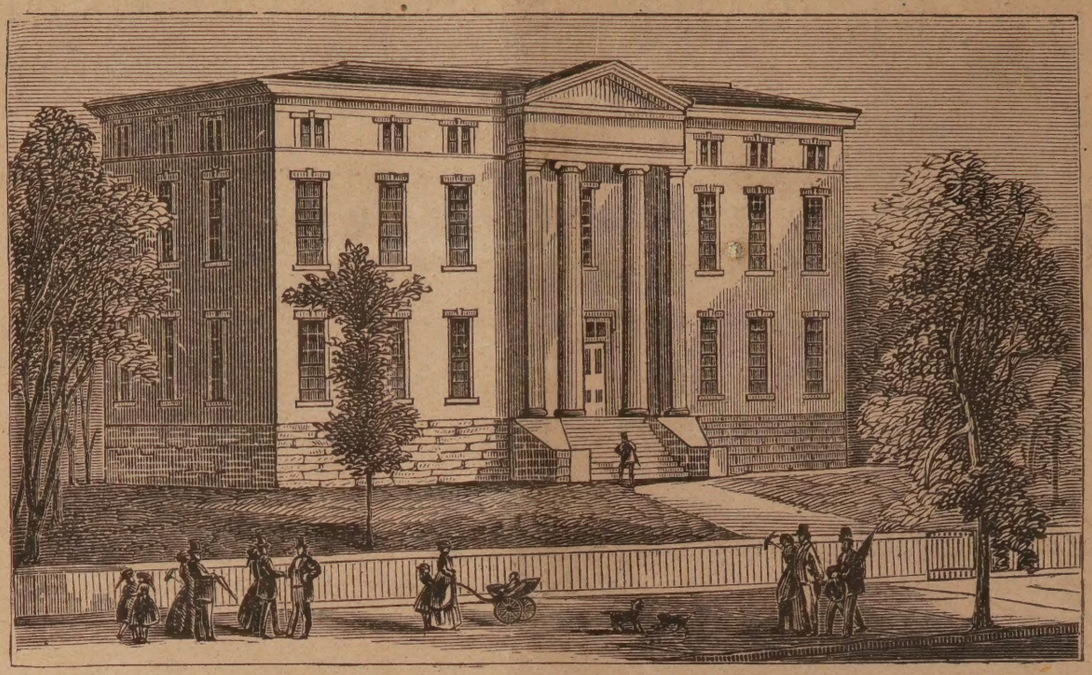

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